

# Resilient Stafford

## Mud City Resilience and Ecological Enhancement Plan

September 20, 2023



Photo Credit: Pennypack Ecological Restoration Trust



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Sustainable change.



# Agenda

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Photo Credit: NJDOT

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# **Resilient Stafford Climate Action Plan**



# Resilient Stafford Climate Action Plan

## Purpose:

- Develop a comprehensive understanding of assets at risk to coastal flooding and future flooding-related climate impacts
- Open and support new conversations among groups and community members impacted by coastal flooding and looking for solutions
- Develop near-, mid-, and long-term proactive measures to reduce both present and future flood risks



Source: Stafford Township, Hurricane Sandy



Source: CME Associates, Flooding in Ocean Acres



Source: NJ Patch, Flash Flood in Atlantis Avenue



Source: Stafford Township, Hurricane Sandy

Four distinct goals were identified to ensure the Resilient Stafford Action Plan aligns with the community's vision and priorities, informed by:

- 2017 Master Plan: Land Use Element (2017)
- Community and stakeholder engagement
- Resilient NJ Program
- Resilient LBI Action Plan
- Other recent plans and studies

## Action Plan Goals

### Goal 1: Preservation of Natural Resources

Protect coastal natural resources from flooding, storm surge, and erosion while promoting conservation and biodiversity.

### Goal 2: Resilient Infrastructure Design

Enhance critical infrastructure design to ensure continued service (mobility, stormwater management, utility) to all communities in Stafford Township.

### Goal 3: Civic Empowerment and Preparedness

Empower community members to provide input on Township projects and make informed decisions for their own properties. Ensure resilience strategies are equitable for all communities to minimize vulnerability and avoid displacement.

### Goal 4: Economic Development Initiatives

Create a sustainable local economy with emphasis on workforce development opportunities, new revenue/funding streams, and mitigation of property value loss.

# **Mud City Climate Resilience and Ecological Enhancement Plan**



## Description:

- Evaluate wetland restoration and flood mitigation measures in the wetland areas surrounding the Mud City neighborhood
- This area was identified as highly vulnerable to flooding, storm surge, and wave action
- Conceptual plans for ecological restoration and coastal resilience are recommended to initiate community planning efforts and support future grant applications

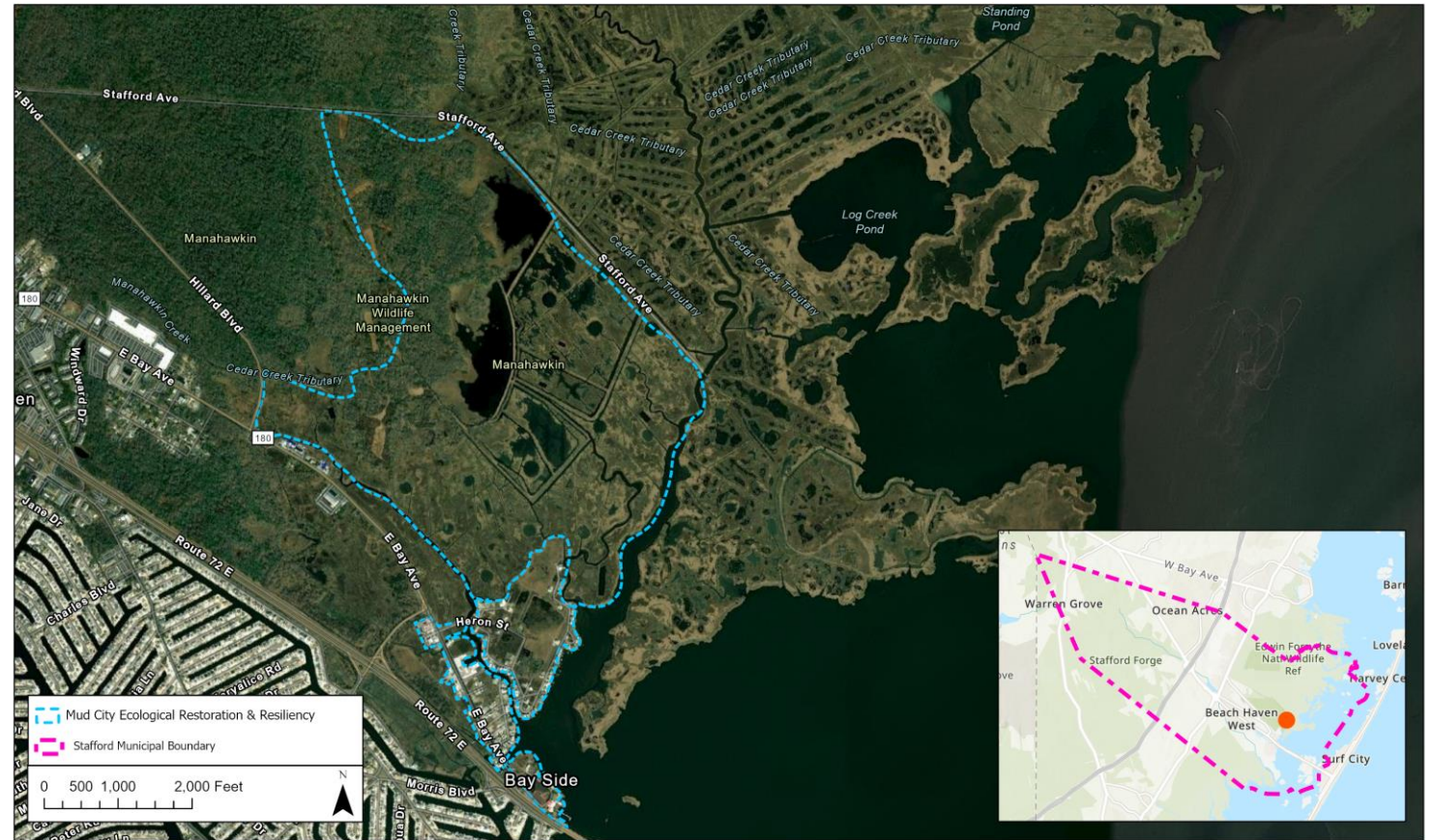
## Cost Estimate:

- Study: \$25k - \$250k
- Implementation: >\$10M

## Timeframe:

- Study: 1-5 years
- Implementation: 5-10 years

# Mud City Resilience and Ecological Enhancement Plan



# Project Tasks

## 1. Existing Conditions Analysis

- Identify restricted parcels, critical risk areas, vulnerable assets
- Summarize opportunities for ecological restoration and enhanced resilience

## 2. Stakeholder Engagement

- Community Engagement Plan to guide community involvement in future implementation efforts
- Stakeholder interviews with Mud City residents and property owners, NJ DEP project teams, NJDOT dredging teams, and Manahawkin WMA Staff

## 3. Solutions Analysis

- Identify a range of appropriate solutions for enhanced wetland function, sea level rise, storm surge and tidal resilience, and storm preparedness and homeowner protection

## 4. Prioritize Solutions

- Prioritization of alternative solutions based on feasibility, risk reduction, and stakeholder input
- Diagrammatic site plan and high-level cost estimates



## Key Objectives

Coordinate with ongoing wetland restoration work in Manahawkin Wildlife Management Area



*Manahawkin Wildlife Management Area, Erik Jacobsen*

## Key Objectives

Engage homeowners for improved discussion and education surrounding hazards and vulnerabilities



*Mallard Island, Andrew Ford*



## Key Objectives

Evaluate existing conditions to understand different land uses, built infrastructure, ecological conditions, and factors impacting adaptation measures



*E Mallard Drive, Bright MLS*



Develop recommended adaptation measures and provide details to assist the Township in seeking future funding





# Next Steps

## Next Steps

1. Complete Existing Conditions analysis for the Mud City Resilience and Ecological Enhancement Plan
2. Organize stakeholder discussions with Mud City residents, NJ DEP project teams, and Manahawkin WMA Staff
3. Resilient Stafford Action Plan coming soon to the Township website

# Questions



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